IN THE CLAIMS:

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of the Claims:

1. (Currently amended) A reactive oil and gas well shaped charge perforator liner comprising a ~~stoichiometric~~ composition of two metals whereby the liner is capable, in operation, of an exothermic reaction upon activation of an associated shaped charge, and in which the two metals are provided in respective proportions calculated to give an electron concentration of 1.5.

2. (Previously presented) A liner according to claim 1 in which one of the metals is aluminium.

3. (Currently amended) A liner according to claim [[1]]30 in which one of the metals is selected from nickel and palladium.

4. (Previously presented) A liner as claimed in claim 1 wherein the composition is a pressed particulate composition.

5. (Previously presented) A liner according to claim 1, wherein a binder is added to aid consolidation.

6. (Currently amended) A liner according to claim [[1]]4, wherein at least one of the metals is coated with a binder to aid consolidation

7. (Previously presented) A liner according to claim 5, wherein the binder is selected from a polymer.

8. (Currently amended) A liner according claim [[7]]5 wherein the ~~polymer~~binder is selected from a stearate, wax or epoxy resin.

9. (Original) A liner according to claim 7, wherein the polymer is an energetic polymer.

10. (Original) A liner according to claim 9, wherein the energetic binder is selected from Polyglyn (Glycidyl nitrate polymer), GAP (Glycidyl azide polymer) or Polynimmo (3-nitratomethyl-3-methyloxetane polymer).

11. (Previously presented) A liner according to claim 5, wherein the binder is selected from lithium stearate or zinc stearate.

12. (Previously presented) A liner according to claim 5, wherein the binder is present in the range of from 0.1 to 5% by mass.

13. (Currently amended) A liner according to claim [[1]]4, wherein the composition is particulate, the particles having a diameter 10μm or less.

14. (Original) A liner according to claim 13, wherein the particles are 1μm or less in diameter.

15. (Original) A liner according to claim 14, wherein the particles are 0.1μm or less in diameter.

16. (Previously presented) A liner according to claim 1, wherein the thickness of liner is selected in the range of from 1 to 10% of the liner diameter.

17. (Original) A liner according to claim 16 wherein the thickness of liner is selected in the range of from 1 to 5% of the liner diameter.

18. (Previously presented) A liner according to claim 1, wherein the thickness of the liner is non-uniform across the surface area of the liner.

19. (Previously presented) A liner according to claim 1, wherein the composition further comprises at least one further metal, wherein the at least one further metal is not capable of an exothermic reaction upon activation of the shaped charge liner.

20. (Original) A liner according to claim 19, wherein the at least one further metal is selected from copper, tungsten, or an alloy thereof.

21. (Currently amended) An oil and gas well shaped charge perforator comprising a liner according to claim 1.

22. (Currently amended) A perforator according to claim 21 comprising a housing, a quantity of high explosive located within the housing and [[a]]the liner ~~according to claim 1~~ located within the housing so that the high explosive is positioned between the liner and the housing.

23. (Previously presented) A perforation gun comprising one or more shaped charge perforators according to claim 21.

24. (Currently amended) A method of completing an oil or gas well using one or more shaped charge liners according to claim 1.

25. (Previously presented) A method of completing an oil or gas well using a one or more shaped charge perforators, according to claim 21.

26. (Currently amended) A method of completing an oil or gas well using one or more perforation guns according to claim [[22]]23.

27. (Currently amended) A method of improving fluid outflow from a well comprising the step of perforating the well using one or more perforators according to claim 21.

28. (Cancelled)

29. (New) A liner according to claim 1 wherein the composition is a stoichiometric composition of two metals.

30. (New) A liner according to claim 1 in which one of the metals is selected from iron, molybdenum, nickel and palladium.

31. (New) A liner according to claim 20, wherein the at least one further metal is uniformly dispersed within the reactive composition.

32. (New) A method of completing an oil or gas well comprising the steps of firing a perforation gun comprising a plurality of shaped charge perforators wherein one or more of said shaped charge perforators comprises a reactive liner according to claim 1.

33. (New) A method according to claim 32 wherein at least two of the perforators are aligned such that their cutting jets will converge, intersect or collide.

34. (New) A method of improving fluid outflow from a well comprising the step of perforating the well using an oil and gas well shaped charge perforator comprising a reactive liner comprising a composition of at least two metals whereby the liner is capable, in operation, of an exothermic reaction upon activation of an associated shaped charge.

35. (New) A method according to claim 34 wherein the composition comprises two metals.

36. (New) A method according to claim 35 wherein the composition is a stoichiometric composition of two metals.

37. (New) A method according to claim 35 wherein the two metals are provided in respective proportions calculated to give an electron concentration of 1.5.

38. (New) An oil well perforation system intended for carrying out the method of claim 34 comprising a perforation gun comprising a plurality of shaped charge perforators wherein one or more shaped charge perforators comprises a reactive liner comprising a composition of at least two metals whereby the liner is capable, in operation, of an exothermic reaction upon activation of an associated shaped charge

39. (New) A method of fracturing a completion for improving the fluid outflow from a well, wherein the reactive liner comprises a composition of at least two metals which are capable, in operation, of an exothermic reaction upon activation of the associated shaped charge liner to produce an intermetallic product.

40. (New) A reactive oil well shaped charge perforator liner comprising a composition of at least two metals whereby the liner is capable, in operation, of an exothermic reaction upon activation of an associated shaped charge, wherein the composition further comprises at least one further metal, wherein the at least one further metal is not capable of an exothermic reaction with the at least two metals, upon activation of the shaped charge liner.

41. (New) A liner according to claim 40, wherein the at least one further metal is selected from copper, tungsten, or an alloy thereof.

42. (New) A liner according to claim 40, wherein the composition is a pressed particulate composition.

43. (New) An oil and gas well shaped charge perforator comprising a liner according to claim 40.

44. (New) A method of completing an oil or gas well comprising the steps of firing a perforation gun comprising a plurality of shaped charge perforators wherein one or more of said shaped charge perforators comprises a reactive liner according to claim 1.